

Amendment After Final Action dated July 5, 2005

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REMARKS

Administrative Overview

Applicants thank Examiner Pillai for the telephone interview held on July 1, 2005, in which the Office action dated May 3, 2005, was discussed, as well as U.S. Patent No. 5,639,594 (*Jacobus*), and the pending claims in the above-referenced case.

The Office action dated May 3, 2005, examined claims 39-83. The Office action rejected claims 39-83 under 35 U.S.C. § 102(e) as being anticipated by *Jacobus*.

Claims 39-83 are currently pending. Without acquiescing to the arguments presented in the Office action, Applicants hereby cancel without prejudice claim 59 and amend claims 82 and 83, as reflected in the Listing of Claims. Applicants explicitly reserve the right to reintroduce the subject matter of claim 59 in future prosecution of this case, or in one or more continuation(s) or divisional(s). Support for these amendments may be found in the application as originally filed, for example, on page 6 line 28 to page 7 line 2, and on page 7 lines 20-24 of the specification. No new matter is added.

Following entry of this Amendment, claims 39-58 and 60-83 will be pending. Applicants request reconsideration and withdrawal of the rejections, and allowance of claims 39-58 and 60-83 in due course.

Claims 39, 60, 82, and 83 are not Anticipated by Jacobus

Claims 39, 60, 82, and 83 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Jacobus*. Applicants respectfully traverse these rejections

Each of claims 39, 60, 82, and 83 recite calculating a force in response to a haptic interface location and a fiducial object location, where the fiducial object location is on the surface of a virtual object. *Jacobus* does not teach or suggest this limitation.

The specification explains, for example, on page 7 lines 20-22:

Forcing the fiducial object to remain on the surface of the virtual object allows for a more realistic generation of the forces ...

Furthermore, the Specification states on page 6, lines 20-21:

As used herein, 'virtual object' is defined as the representation of the real world object in graphic space.

Jacobus does not teach or suggest a fiducial object located on the surface of a virtual object. *Jacobus* states at col. 2 lines 57-60:

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According to the present invention, an electric signal is generated
... as a function of the user position and orientation in three-
dimensional space.

The force field generated in *Jacobus* is, “a function of the user position and orientation in three-dimensional space” [emphasis added]. The force field is not a function of two positions – it is a function of a position and an orientation, where orientation indicates the direction in which the user is facing. Even if it could be considered that “orientation” refers to a second position, there is no teaching or suggestion in *Jacobus* to apply a force that is a function of a location on the surface of a virtual object.

Jacobus describes the implementation of a detent at column 10 line 17 to column 11 line 4, wherein a force is computed as a function of the distance, D, from the detent center, Xc, Yc. However, unlike the fiducial object location of claims 39, 60, 82, and 83, the detent center of *Jacobus* is not located on the surface of a virtual object.

Therefore, because *Jacobus* does not teach or suggest all of the limitations of either of claims 39, 60, 82, and 83, as amended, claims 39, 60, 82, and 83 are patentable in light of *Jacobus*, and Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(e) of claims 39, 60, 82, and 83.

Dependent claims 40-58 and 61-81 are not Anticipated by *Jacobus*

Claims 40-58 and 61-81 each depend directly or indirectly on either independent claim 39 or 60, and as such, each include all the limitations of their respective parent claim. Thus, claims 40-58 and 61-81 are allowable for at least the reasons discussed above with respect to claims 39 and 60. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections of dependent claims 40-58 and 61-81 under 35 U.S.C. § 102(e), at least on this basis.

No Form PTO-892 Was Made Available to Applicants

The Office action does not appear to address Applicants’ request in the previous Amendment and Response filed in this case on December 13, 2004, regarding references cited on a form PTO-892. Applicants respectfully request that if such a form exists, that a copy be forwarded to Applicants’ representative so that it may be considered in response.

Conclusion

Applicants request that the Examiner reconsider and withdraw the standing objection and rejections in light of this Amendment and Response, and that the application be allowed. Applicants respectfully submit that all of claims 39-58 and 60-83 are in condition for allowance.

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If the Examiner believes that it would be useful to discuss any aspect of the application by telephone, the undersigned representative cordially invites the Examiner to call at the telephone number given below.

Respectfully submitted,



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